

Bending beam To 500 kg Model F3203

WIKA data sheet FO 51.73



Applications

- Hopper scales, industrial scales
- Price labelling scales
- Dosing units
- Laboratory technology
- Process technology

Special features

- Measuring ranges 0 ... 20 kg to 0 ... 500 kg
- 3,000 intervals per OIML R60 Class C
- Stainless steel, hermetically sealed and welded bellows
- Ingress protection: IP68 and IP69K



Bending beam, model F3203

Description

Bending beams are suitable for static and dynamic measuring requirements. They serve for determining forces in diverse fields of application.

They are used in industrial weighing and laboratory technology, and also in the process industry.

The F3203 bending beams are made of stainless steel, whose properties are particularly suitable for the fields of area in scales and process technology. An mV/V signal is provided as the output signal.

The F3203 bending beams are certified by the International Organisation of Legal Metrology (OIML) with 3,000 intervals R60 Class C.

Notes



To avoid overloading, the bending beam should be electrically connected and the measured value monitored during assembly. The measuring force must be introduced through the centre and free of transverse force.

The bending beams must be mounted on a flat surface

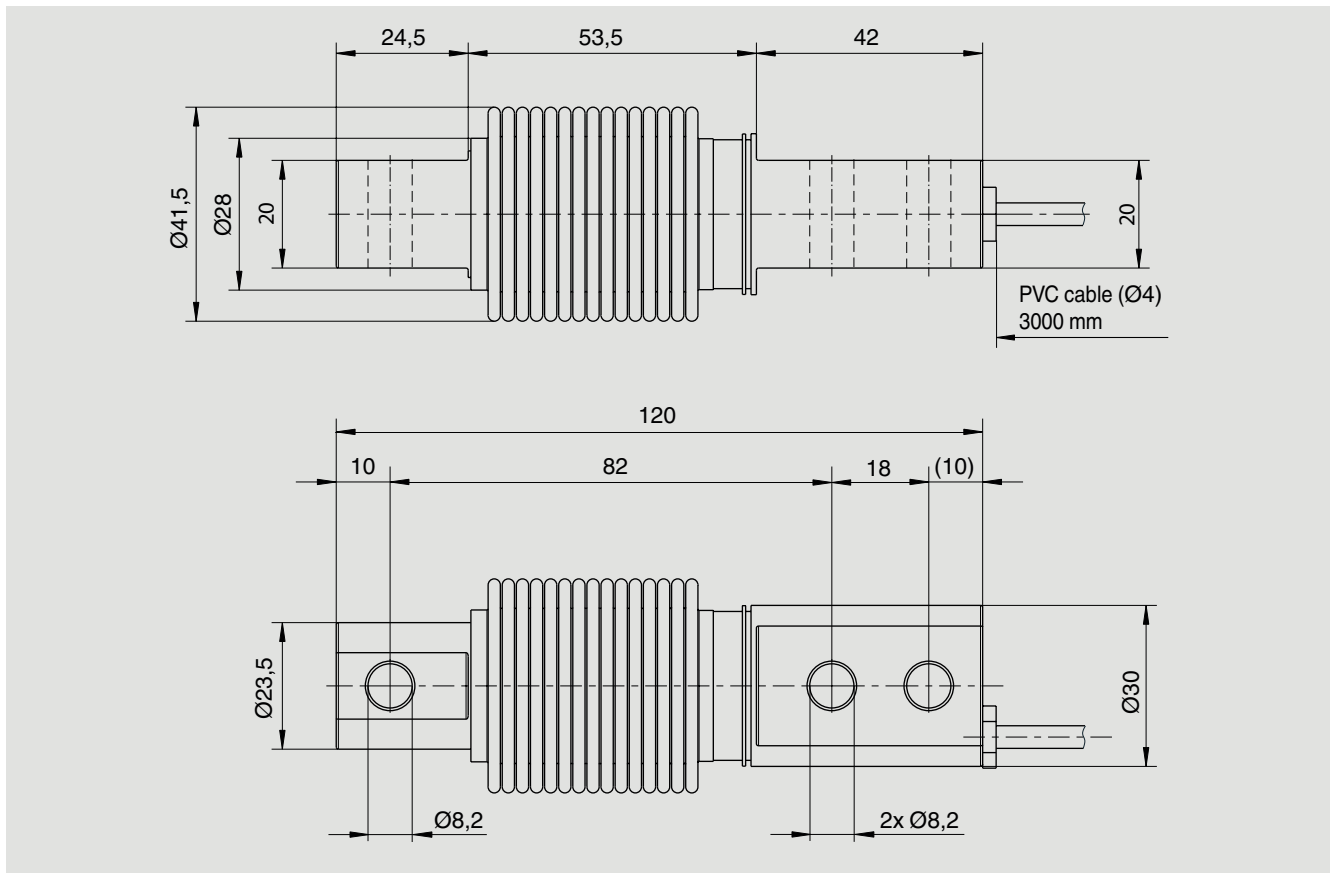
Specifications per VDI/VDE/DKD 2638

Model F3203	
Rated load F_{nom} kg	20, 50, 100, 200, 500
Relative linearity error d_{lin}	0.017 % F_{nom}
Accuracy class	3,000 intervals per OIML R60 Class C
Relative creep, 30 min.	< ± 0.016 % F_{nom}
Relative reversibility error v	± 0.015 % F_{nom}
Temperature effect on zero signal TK_0	$\leq \pm 0.02$ %/10 K
Temperature effect on characteristic value TK_C	$\leq \pm 0.012$ %/10 K
Force limit F_L	150 % F_{nom}
Breaking force F_B	200 % F_{nom}
Material of the measuring body	Stainless steel
Rated temperature range $B_{T, nom}$	-10 ... +40 °C
Operating temperature range $B_{T, G}$	-30 ... +70 °C
Input resistance R_e	400 \pm 20 Ω
Output resistance R_a	350 \pm 3 Ω
Insulation resistance R_{is}	$\geq 5,000$ M Ω
Output signal (rated characteristic value) C_{nom}	
20 kg	2.0 \pm 0.2 % mV/V
50 kg bis 500 kg	2.0 \pm 0.1 % mV/V
Electrical connection	Measuring cable \varnothing 4 x 3 m
Excitation voltage $B_{U, nom}$	DC 10 V ... 15 V
Ingress protection (per IEC/EN 60529)	IP68 and IP69K
Weight	0.5 kg

Approvals

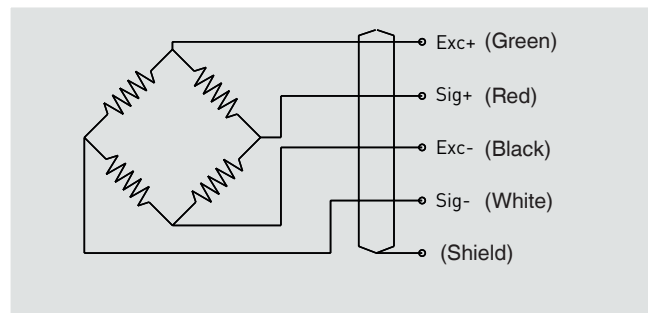
Logo	Description	Country
	EU declaration of conformity RoHS-directive	European Union
	International Organization of Legal Metrology	Worldwide

Dimensions in mm

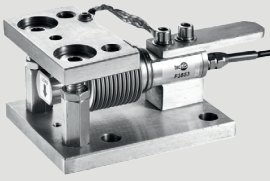
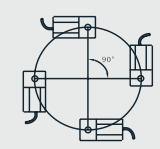
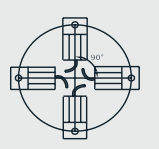

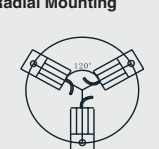
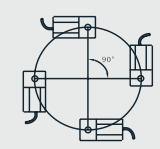
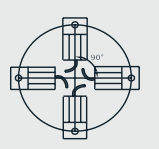

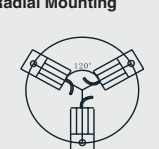
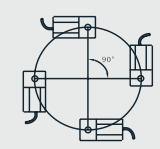
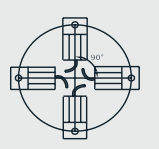

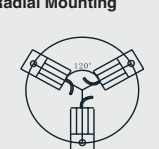


Pin assignment

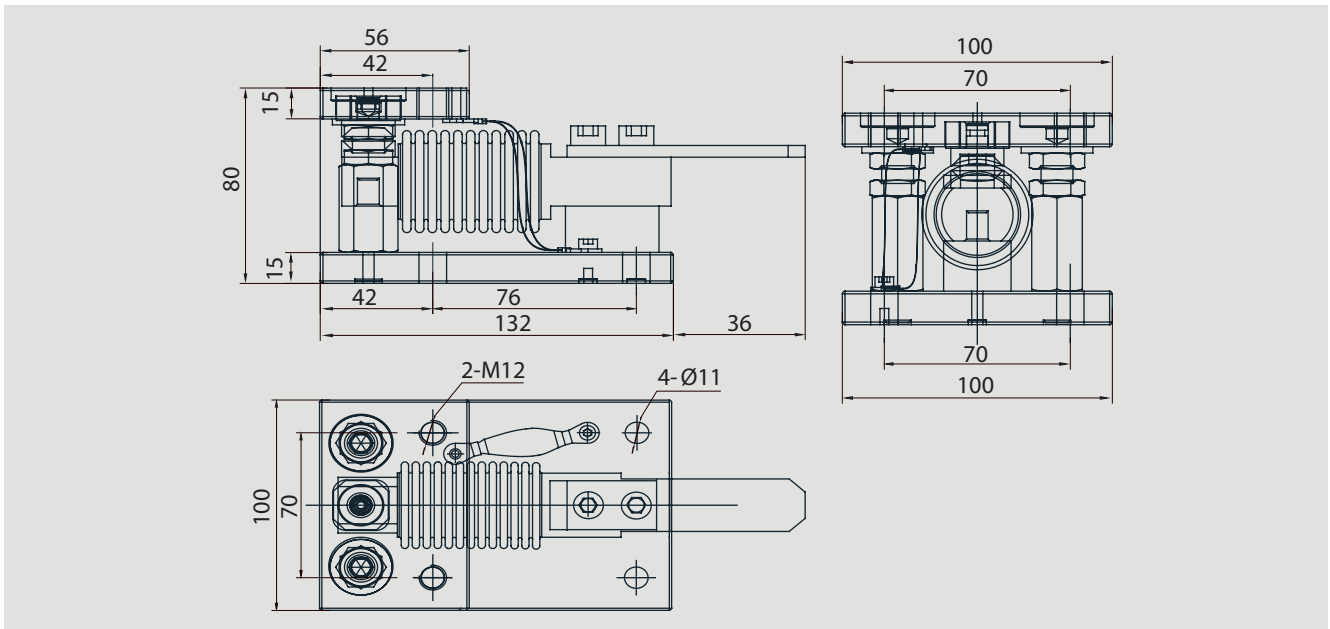
Electrical connection	
Excitation voltage (Exc+)	Green
Excitation voltage (Exc-)	Black
Signal (Sig+)	Red
Signal (Sig-)	White
Shield \oplus	Shield



Accessories

	Description								
<p>AZK03</p> 	<p>Mounting kit</p> <ul style="list-style-type: none"> ■ Material: Stainless steel ■ Weight: 2.4 kg <p>Mounting options</p> <table border="1"> <thead> <tr> <th colspan="2">4 Vessel feet</th> </tr> </thead> <tbody> <tr> <td> <p>Tangential Mounting</p>  </td> <td> <p>Radial Mounting</p>  </td> </tr> <tr> <th colspan="2">3 Vessel feet</th> </tr> <tr> <td> <p>Tangential Mounting</p>  </td> <td> <p>Radial Mounting</p>  </td> </tr> </tbody> </table>	4 Vessel feet		<p>Tangential Mounting</p> 	<p>Radial Mounting</p> 	3 Vessel feet		<p>Tangential Mounting</p> 	<p>Radial Mounting</p> 
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<p>AZK01</p>	<p>Mounting options as for AZK03. As well as the AZK03 mounting kit, base plates, load feet and rubber elements are also available. Dimensions on request.</p>								

Dimensions in mm



Ordering information

Model / Rated load / Approvals, certificates / Relative linearity error / Temperature range / Output signal / Electrical connection /

Options

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The specifications given in this document represent the state of engineering at the time of publishing.

We reserve the right to make modifications to the specifications and materials.

